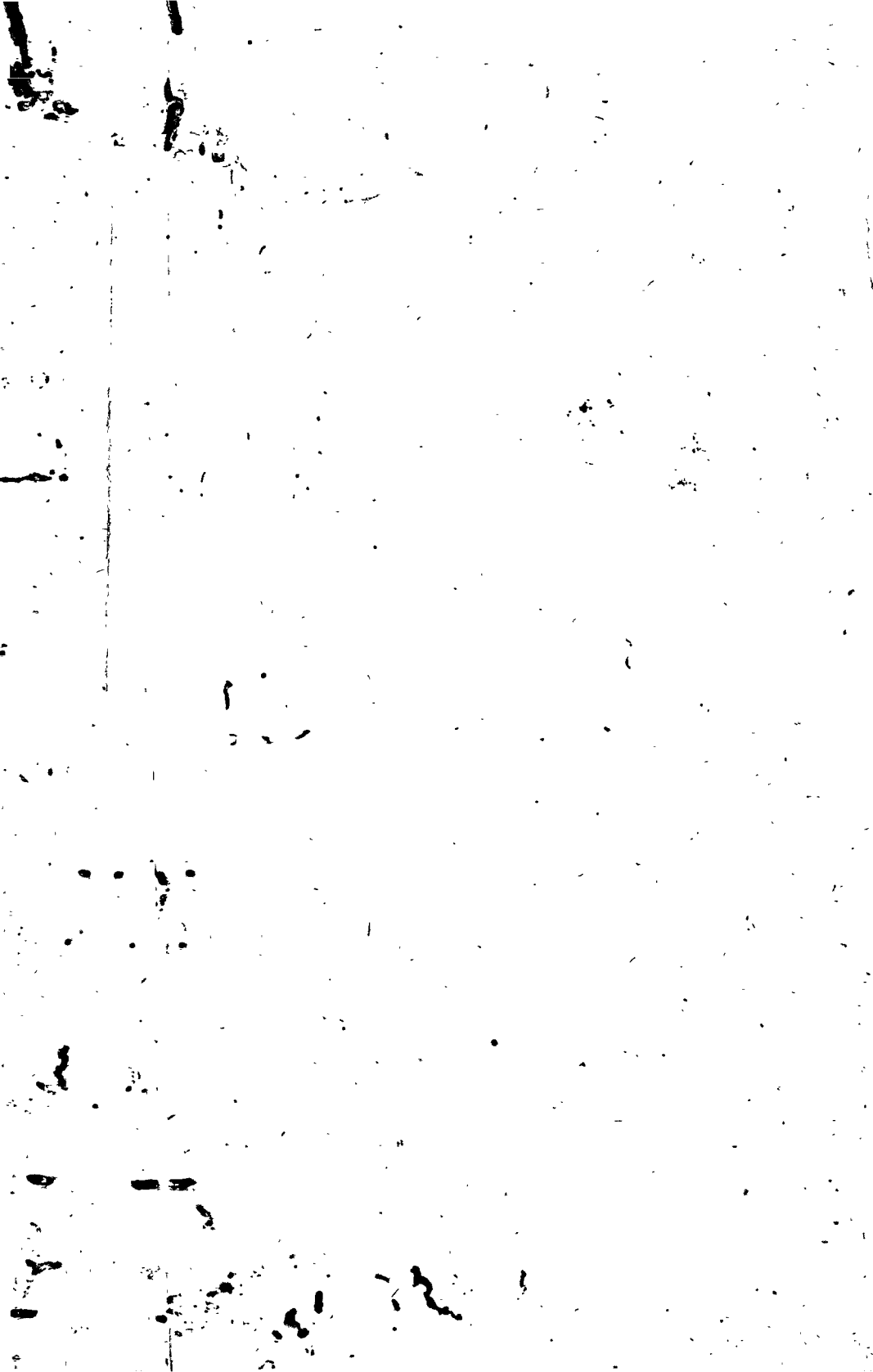


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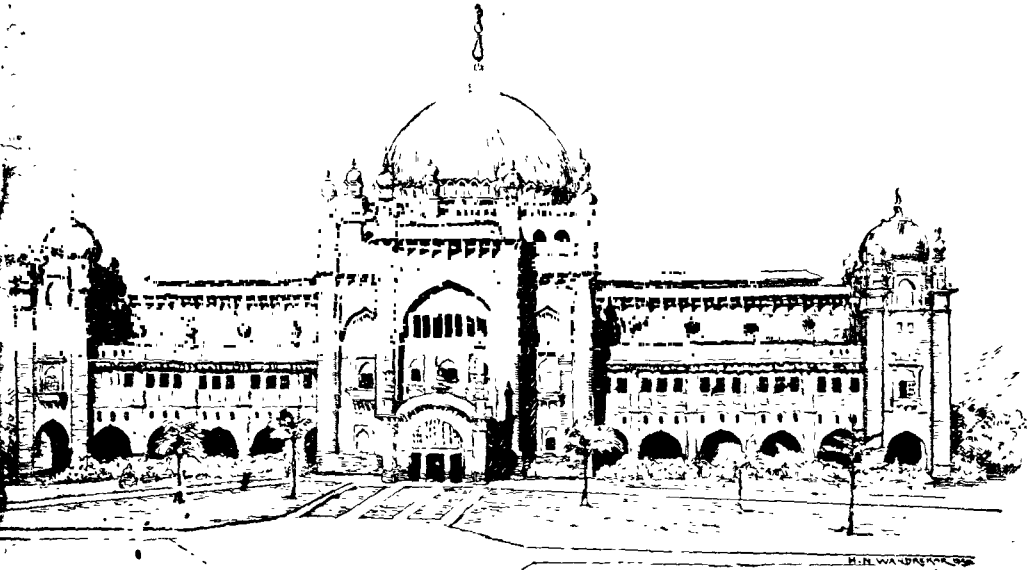
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Prince of Wales Museum of Western India



*Report for the year
1936-37*

(Published by the Trustees)

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BOMBAY
PRINTED AT THE GOVERNMENT CENTRAL PRESS
1937

1937

PRINCE OF WALES MUSEUM OF WESTERN INDIA.

The Museum is open to the public from 10 a.m. to 5-30 p.m. or 6 p.m. on all days of the week except Monday. It is however kept open on such Mondays as are gazetted public holidays. It is closed on Good Friday and Christmas Day. Admission is free on all days except Wednesday, when a fee of 2 annas per person is charged.

EXHIBITS IN THE PUBLIC GALLERIES.

Ground floor	..	Vestibule	.. Large bronzes, etc.
		Central Hall	.. Statuary and textiles, etc.
		East Wing	.. Brahmanical gallery and memorial stones.
		West Wing	.. European, Chinese, Japanese and Indian exhibits.
		North Side	.. Jain and Prehistoric gallery.
Intermediate floor..	{	Central	.. Invertebrate and economic botanical gallery.
		East	.. Buddhistic and epigraphical galleries and coin room.
		West	.. Copies of Ajanta Frescoes and Indian paintings.
		North	.. Miscellaneous antiquities gallery.
Top floor	..	Central	.. Manuscripts, etc.
		East	.. Western and Indian paintings.
		West	.. Western and Indian paintings, draperies etc.
		North	.. Jade, China, Tibetan exhibits, Venetian glass, lacquer, ivory, bidri, brass, etc.
		South	.. Arms and armour (and minerals).
		{ The Gem Room. Small European paintings.	

CONTENTS

	PAGE
GENERAL REMARKS	1
THE ART SECTION	11
THE ARCHAEOLOGICAL SECTION	16
THE NATURAL HISTORY SECTION	25

Illustrations.

	Facing Page
SIDE VIEW OF SIR D. J. TATA GALLERY	11
FRONT VIEW OF AJANTA GALLERY	12
A VIEW OF THE NEW PREHISTORIC GALLERY	16
A VIEW OF THE NEW EPIGRAPHICAL GALLERY	18
<i>The Bird Gallery.</i> —NATURAL HISTORY SECTION, PRINCE OF WALES MUSEUM	29
<i>Fish and Reptile Gallery.</i> —NATURAL HISTORY SECTION, PRINCE OF WALES MUSEUM	31

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GENERAL

A census taken for a week showed that as in the previous years so also during the year under review the number of visitors averaged to over 2,000 a day on the free days despite the fact that certain Art Galleries, on account of repairs, and practically all of the Natural History galleries, due to complete reorganisation of the Section, remained closed to the public. The popularity of the Museum is still increasing.

The Trustees have been expediting the work of installing and exhibiting the collections in the Museum extension with the object of opening the new galleries to the public as early as possible; but the amount of work which has still to be accomplished, particularly in the Natural History Section which is being re-modelled entirely on modern lines, and the paucity of requisite funds, are the main causes for postponing the opening to the early part of 1938. The Trustees, however, are confident that the delayed opening will be more than compensated for by the added attraction and instruction which the new galleries will afford to the public.

The most outstanding addition during the year has been the collection of world famous antiquities excavated at Mohenjodaro in Sind. Thanks to the Government of Bombay, their share of the antiquities was kindly made over to the Museum by Mr. Blakiston, the late Director General of Archæology in India.

The noteworthy exhibitions in attractive settings in the galleries in the main building are the magnificent Art collections of the late Sir Dorab Tata, and the important collections of Mughal paintings and fine copies of the Ajanta frescoes of the Rt. Hon'ble Sir Akbar Hydari.

A reference must be made to the interesting and illuminating Report on the Museums of India, by Mr. S. F. Markham, M.P., and Mr. H. Hargreaves, which has been published by the Museums Association, London. The Prince of Wales Museum on the whole has emerged very favourably from the Report and is placed high among the larger Museums of India. Nevertheless, the Trustees realise that, if this Museum is to reach the high standards of educational activities obtaining in the Museums of North-West Europe and America, it has much leeway to make up to become a vital factor in the educational

life of the city and the Presidency. The chief impediment to this achievement is the lack of adequate funds. The Markham Report, while it states "it is amazing what has been done, particularly at Bombay and Madras on budgets below those of the principal towns of the British Empire and the U. S. A.", points out that "The pitiful expenditure of less than £60,000 (Rs. 8,10,000) which serves over a hundred museums throughout the length and breadth of India is sufficient to support only three or four first-class institutions".

An appreciation of Captain Gladstone Solomon's services to the Museum, both as a Trustee of the Museum and as Curator of the Art Section, was recorded by the Trustees at a meeting of the Board.

The progress of the working of the main Sections is detailed in the sub-joined Reports of the Curators.

An abstract of accounts of Receipts and Payments for the year appears in Appendix I, and the names of the Trustees and the members of the staff are shown in Appendix II.

APPENDIX I (a).
CURRENT FUND.

Abstract of Income and Expenditure for the year 1936-37.

Income.			Expenditure.		
	Rs.	a. p.		Rs.	a. p.
To Opening Balance ..	3,761	13 4	By Establishment ..	47,459	3 0
			„ Board's Contribution to- wards Provident Fund.	3,747	6 0
Chartered Bank.	2,561	13 4	„ Contingent Charges ..	1,552	14 9
Permanent Ad- vance.	1,200	0 0	„ Stationery ..	445	3 6
			„ Postage and Telegrams ..	98	5 3
			„ Furniture—Office ..	152	0 0
			„ Washing and Cleaning ..	320	5 0
	3,761	13 4	„ Electric Energy Charges ..	632	15 10
			„ Municipal Taxes ..	2,190	0 0
To Municipal Grant ..	25,000	0 0	„ Printing of Annual Reports.	248	6 0
„ Government Grant ..	30,000	0 0	„ Audit Fees ..	550	0 0
„ Admission Fees ..	1,040	4 0	„ Telephone ..	250	0 0
„ Interest on Current Account	52	6 0	„ Purchase of Books ..	536	9 6
„ Payment by N. H. Section towards :—			„ Membership of Societies ..	85	0 0
(a) Electric Energy ..	307	12 0	„ Labels, Catalogues, etc. ..	541	2 0
(b) Municipal Taxes ..	303	2 0	„ Printing of Picture Post- cards.	95	0 0
„ Sale of Catalogues and Picture Postcards.	239	14 0	„ Restoration of Pictures ..	340	0 0
„ Recovery from the Right Honourable Sir A. Hydari on account of insurance of his collec- tion.	37	2 0	„ Rebacking of Pictures ..	48	12 0
„ Sale Proceeds from the Garden.	1,992	8 0	„ Curtains for Pictures ..	15	0 0
„ Sale Proceeds of Petty Articles.	6	8 0	„ Insurance Charges—Hydari Collection.	98	15 0
„ Examination Fee on Coins	84	0 0	„ Photographing, etc., of Exhibits.	95	0 0
„ Transfers from Reserve Fund to meet Deficit.	4,000	0 0	„ Darning and Mending of Exhibits.	92	12 0
			„ Livery ..	164	3 6
			„ Garden and Grounds ..	4,358	6 0
				64,117	7 4
			„ Closing Balance ..	2,707	14 0
			Rs. a. p.		
			Chartered Bank.	1,507	14 0
			Permanent Ad- vance.	1,200	0 0
				2,707	14 0
Total ..	66,825	5 4	Total ..	66,825	5 4

J. F. JACOBS,

Secretary.

Prince of Wales Museum of Western India.

APPENDIX I (b).
BUILDING FUND.

Abstract of Income and Expenditure for the year 1936-37.

Income.		Expenditure.	
	Rs. a. p.		Rs. a. p.
To Opening Balance	4,570 4 10	By Maintenance—Museum Buildings.	1,685 1 9
Imperial Bank ..	24 5 6	„ Allowance for Supervision—Museum Buildings.	180 0 0
Chartered Bank.	4,445 15 4	„ Maintenance—Electric Installation.	1,072 0 0
Permanent Advance.	100 0 0	„ Insurance Charges—Servants' Quarters.	33 0 0
	4,570 4 10	„ Special Repairs to Building Domes, etc., etc.	2,076 0 0
To Interest on Securities	6,458 12 0	„ Special Repairs to the Ceilings, etc.	6,995 2 0
„ Interest on Current Account.	14 0 0		12,041 3 9
„ Maintenance—Electric Installation, Refund from Electrical Engineer.	2 9 0	By Closing Balance	1,046 14 1
„ Sale of Lavatory Shed	42 8 0	Imperial Bank ..	Rs. a. p. 48 3 6
„ Transfer from Reserve Fund.	2,000 0 0	Chartered Bank.	898 10 7
		Permanent Advance.	100 0 0
			1,046 14 1
Total ..	13,088 1 10	Total ..	13,088 1 10
Amount of Securities held—Government Promissory Notes (face value) Rs. 1,69,200.			

J. F. JACOBS,
Secretary,
Prince of Wales Museum of Western India.

APPENDIX I (c)—*contd.**Abstract of Income and Expenditure for the year 1936-37—contd.*

Income.			Expenditure.		
BUILDING EXTENSION FUND.					
Rs. a. p.			Rs. a. p.		
To Opening Balance	85,255	8 6	By Building Extension	3,575	0 0
			„ Reconstruction of the Servants' W. C.	2,009	6 0
	Rs. a. p.		„ Show Cases—Archæological Section.	8,224	7 0
Chartered Bank	10,255	8 6	„ Show Cases—Art Section.	18,881	5 0
Fixed Deposits, Central Bank.	75,000	0 0	„ Iron Railings ..	700	0 0
			„ Transfer to Reserve Fund	40,000	0 0
	85,255	8 6		73,390	2 0
„ Interest on Fixed Deposits .	1,422	1 4			
„ Interest on Current Account	152	10 0			
„ Sale of Teakwood Window Frames.	75	0 0	By Closing Balance—Chartered Bank.	13,515	1 10
Total	86,905	3 10	Total	86,905	3 10

J. F. JACOBS,

Secretary,

Prince of Wales Museum of Western India.

APPENDIX I (d).
PROVIDENT FUND.

**Abstract of Receipts and Payments for the year 1936-37.*

Receipts.			Payments.		
	Rs.	a. p.		Rs.	a. p.
To Opening Balance ..	6,471	0 6	By Payments to Subscribers ..	3,566	2 0
	Rs.	a. p.	„ Purchase of Securities	10,208	4 5
Chartered Bank	6,371	0 6	(face value Rs. 9,800).		
Permanent Ad- vance.	100	0 0			
	6,471	0 6		13,774	6 5
			By Closing Balance ..	4,255	5 1
			Rs. a. p.		
To Subscribers' Contributions ..	3,761	13 0	Chartered Bank	4,155	5 1
„ Board's Contributions ..	3,747	6 0	Permanent Ad- vance.	100	0 0
„ Loans repaid by Sub- scribers.	1,528	4 0			
„ Interest on Securities ..	2,509	5 0			
„ Interest on Current Account.	11	15 0		4,255	5 1
Total ..	18,029	11 6	Total ..	18,029	11 6

Amount of Securities held Government
Promissory Notes (face value) Rs. 69,500.

J. F. JACOBS,
Secretary,
Prince of Wales Museum of Western India.

3 APPENDIX I (e).

NATURAL HISTORY SECTION, PRINCE OF WALES MUSEUM—PROVIDENT FUND.

Abstract of Receipts and Payments for year 1936-37.

Particulars.	Receipts.	Particulars.	Payments.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Bank Balance on 1st April 1936.	2,943 6 11	Payments to Subscribers.	2,634 3 0
Rs. a. p.		Purchase of Securities face value Rs. 4,000.	3,951 4 0
Subscribers Contributions.	1,790 1 0		6,585 7 0
Boards Contributions.	1,788 1 0	Bank Balance on 31st March 1937.	2,217 3 4
Interest ..	1,746 1 5		
	5,324 3 5		
Loans Repaid by Subscribers ..	535 0 0		
Total ..	8,802 10 4	Total ..	8,802 10 4

	Rs. a. p.
3½ per cent. Promissory Notes ..	30,100 0 0
Loan 1945-55 at 5 per cent. ..	500 0 0
„ 1939-44 at 5 per cent. ..	2,500 0 0
„ 1938-40 at 5½ per cent. ..	3,000 0 0
„ 1947-50 at 3½ per cent. ..	6,000 0 0
„ 1951-54 at 3 per cent. ..	4,500 0 0
Total, Face Value ..	46,600 0 0

P. M. D. SANDERSON,

Chairman,

Natural History Section,
Prince of Wales Museum.

Bombay, 22nd April 1937

APPENDIX I (f).

NATURAL HISTORY SECTION, PRINCE OF WALES MUSEUM.

Statement of Accounts of the Natural History Section, Prince of Wales Museum of Western India, from 1st April 1936 to 31st March 1937.

Particulars.	Receipts 1936-1937.	Particulars.	Payments 1936-1937.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Bank Balance on 1st April 1936. 7 9 9		Establishment 23,255 0 0	
Permanent Advance. 100 0 0		Boards Contribution to Provident Fund. 1,788 1 0	
	107 9 9	Contingent Charges .. 789 11 6	
Government Grant. 29,700 0 0		Stationery 22 10 0	
Interest on current account, etc. 17 8 0		Post and Telegrams .. 19 15 3	
An allowance on account of Forest Section. 112 12 0		Electric energy and repairs .. 360 8 8	
Sales of Snakes Pamphlets. 6 0 0		Mounting Specimens .. 2,406 7 0	
Sales of Museum Guide Books. 6 0 0		Rent 720 0 0	
Loan from Museum Trustees. 2,500 0 0		Maintenance Charges .. 303 2 0	
	32,342 4 0	Labels, Catalogues .. 184 14 6	
		Purchase of Specimens .. 1 8 0	
		Constructions of new cases and additions and alteration to old cases. 2,095 9 0	
		Bank Balance on 31st March 1937. 402 6 10	
		Permanent Advance .. 100 0 0	
	32,449 13 9		32,449 13 9

P. M. D. SANDERSON,

Chairman,

Natural History Section,
Prince of Wales Museum.

Bombay, 23rd April 1937.

APPENDIX II.

BOARD OF TRUSTEES FROM 1ST APRIL 1936 TO 31ST MARCH 1937.

(Names of the electing body, etc. are given in parentheses in the case of each Trustee.)

The Honourable Sir PHIROZE C. SETHNA, Kt., O.B.E., (Co-opted by the Board) Chairman, (elected).

Mr. P. B. ADVANI, M.Sc., M.I.E., Director of Industries, (*ex-officio*).

Mr. M. S. JAYAKAR, M.A., C.I.E., Collector of Bombay, (*ex-officio*) up to 28th October 1936.

Mr. T. E. STREATFIELD, I.C.S., Collector of Bombay, (*ex-officio*) from 29th October 1936.

Mr. W. E. G. SOLOMON, K-i-H., R.B.C., I.E.S., F.R.S.A., Director, Sir J. J. School of Art, Bombay, (*ex-officio*) up to 24th March 1937.

Mr. C. R. GERRARD, A.R.C.A., R.B.A., R.O.I., Director, Sir J. J. School of Art, Bombay, (*ex-officio*) from 11th April to 10th July 1936 and from 25th March 1937.

The Superintendent, Archæological Survey, W.C., Poona, (*ex-officio*).

Mr. B. G. PARELKAR, (Municipal Corporation).

Prof. V. G. RAO, B.A., LL.B. (Cantab.), Bar-at-Law, O.A., (Municipal Corporation).

Sir COWASJI JEhangir, Bart., K.C.I.E., O.B.E., M.L.A., (Nominated by Government).

Dr. M. B. REHMAN, M.A., Ph.D., Principal, Ismail College, Andheri, (Nominated by Government).

Dr. T. S. WHEELER, Ph.D., F.I.C., F.R.C. Sc.I., Director, Royal Institute of Science, Bombay, (Nominated by Government).

Rev. Fr. J. F. CAIUS, S. J., (Bombay Natural History Society) up to 10th November 1936.

Mr. P. M. D. SANDERSON, F.Z.S., (Bombay Natural History Society) from 11th November 1936.

Mr. S. H. PRATER, C.M.Z.S., M.L.A., (Bombay Natural History Society).

Dr. G. S. GHURYE, M.A., Ph.D., (Bombay Branch Royal Asiatic Society).

Mr. S. D. SAKALATVALA, (Tata Trustees).

Diwan Bahadur K. M. JHAVERI, M.A., LL.B., (University of Bombay).

Mr. G. V. ACHARYA, B.A., M.R.A.S., (Co-opted by the Board).

NATURAL HISTORY SECTION COMMITTEE OF THE PRINCE OF WALES MUSEUM.

Rev. Fr. J. F. CAIUS, S.J., *Chairman*, (elected up to 10th November 1936).

Mr. P. M. D. SANDERSON, F.Z.S., *Chairman*, (elected from 11th November 1936).

Diwan Bahadur K. M. JHAVERI, M.A., LL.B.

Mr. S. H. PRATER, C.M.Z.S., M.L.A.

STAFF.

Mr. J. F. JACOBS, B.Sc., *Secretary*.

Mr. G. V. ACHARYA, B.A., M.R.A.S., *Curator, Archæological Section*.

Mr. R. G. GYANI, M.A., M.R.A.S., *Assistant Curator, Archæological Section*.

Mr. W. E. G. SOLOMON, K-i-H., R.B.C., I.E.S., F.R.S.A., *Curator, Art Section, up to 24th March 1937*.

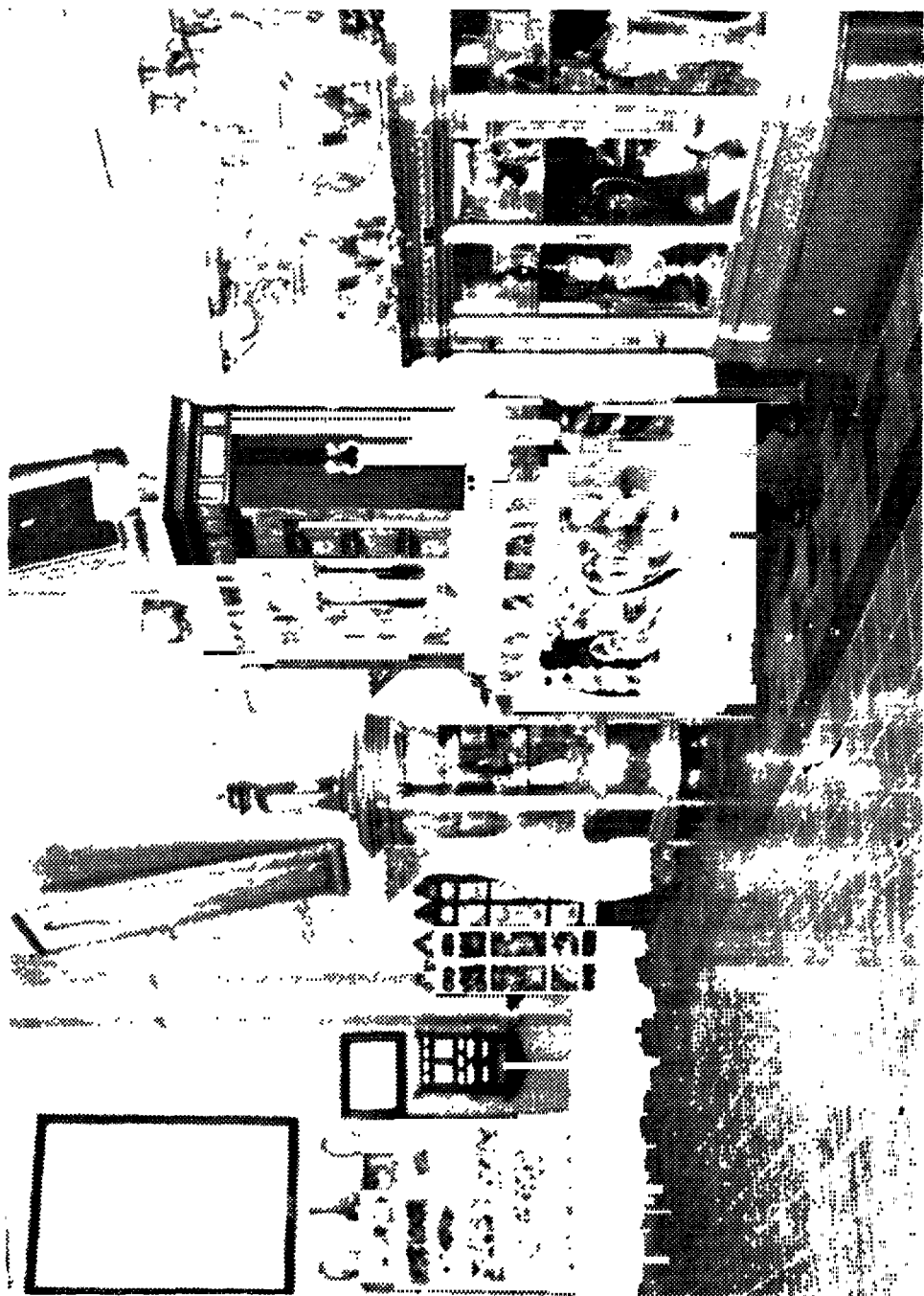
Mr. E. D'LIMA, *Assistant Curator, Art Section*.

Mr. S. H. PRATER, C.M.Z.S., M.L.A., (*Curator, Bombay Natural History Society*) *Curator, Natural History Section*.

Mr. CHARLES McCANN, (*Assistant Curator, Bombay Natural History Society*) *Assistant Curator Natural History Section*.



SIDE VIEW OF SIR D. J. TATA GALLERY



REPORT OF THE ART SECTION FOR THE YEAR APRIL 1936 TO MARCH 1937

PERSONNEL

The Curator, Captain Gladstone Solomon, proceeded to England on a short leave early in April 1936, and relinquished his post as Curator of the Art Section on his retirement from the post of Director of the Bombay School of Art on the 25th March 1937. The Art Section records with deep regret its loss at the severance of his connection from the Art Section with which he was associated for the past eighteen years—since the very inception of the Museum. He was mainly instrumental in establishing and developing this Section to its present high standard of efficiency and popularity. During his absence on leave, and pending the appointment of a Curator, the Assistant Curator, Mr. E. D'Lima, was in charge of the Art Section.

At the request of the authorities of the Sangli State the Assistant Curator of the Art Section, Mr. E. D'Lima, and Mr. R. G. Gyani, the Assistant Curator of the Archæological Section, were deputed to Sangli to advise in the re-arrangement of the exhibits in the collection of the State, in the new building. After carefully listing and classifying the exhibits they submitted their report to the Fourth Councillor, Sangli State, who acknowledged on behalf of the State the appreciation of the services rendered by the Assistant Curators, and thanked the Trustees for lending their services to the Darbar.

LABELS AND CATALOGUES

Considerable attention was paid to the work of labelling the exhibits. About 350 specific labels were prepared for the Chinese porcelain exhibits, the Relics of the Satara Kings, and some objects from the Sir D. J. Tata Collection. Descriptive cellophane labels on glass have been introduced in some of the show cases of the Sir D. J. Tata collection. Forty Rajput and Mughal paintings were appropriately labelled with descriptions and notes, and brass labels bearing the names of the caves from which they were copied, were prepared for the Ajanta drawings. The descriptive labels are in the course of preparation.

PUBLICITY

• The Curator published an article in the "Times of India" describing the changes which have taken place in the Art Section galleries in consequence of the allotment of new galleries to it on the expansion of the Museum premises.

At the request of the Editor of the "Illustrated Weekly of India" permission was given to him to photograph the newly set up Sir D. J. Tata Collection Gallery. The illustrations appeared in the "Times of India" and in the "Illustrated Weekly" with a short note on the Collection.

PHOTOGRAPHING OF EXHIBITS

Permission to photograph exhibits in the Art Section for reproduction in books and journals or required merely for the purpose of study, was given.

CONSTRUCTION OF THE SHOW CASES

The construction of the show cases for the new galleries, which was taken in hand last year, was completed during the present year. Several more show cases had to be made to meet the requirements in Sir D. J. Tata Gallery. Entirely new show cases were designed and constructed for Sir Akbar Hydari Gallery of Ajanta and Indian pictures. Alterations were made in several old show cases, fitting them with glass shelves for the Continental exhibits; in some show cases nickel fittings for hanging draperies were added. Wooden moveable rails have been set up for the protection of some ornamental exhibits.

NEW GALLERIES AND TRANSFER OF EXHIBITS

With the completion of the new wing five new galleries have come into the possession of the Art Section. This has necessitated re-arranging and re-distributing the exhibits in the department. One of the galleries on the ground floor of the main building previously occupied by the Bird and Mammal department of the Natural History Section has been utilised for housing the newly acquired Sir D. J. Tata Collection. The Fish and Reptile Gallery on the Intermediate floor, has been converted into a separate gallery for the exhibition of the Sir Akbar Hydari Collections. This gallery was specially designed by the Curator in dark panelling arranged along the alcoves of the gallery, in which, for the first time, the fine copies of Ajanta Frescoes permanently donated to the Art Section by Sir Akbar Hydari, are to be seen in a setting befitting them. The intervening spaces in the gallery have been fitted with cases containing his Loan Collection of the Mughal paintings. The three galleries in the new wing given to this Section contain, respectively, the Relics of the Satara Throne Collection, comprising draperies, fabrics, jade, and weapons; the School of Art Collection of draperies, fabrics, brass, and musical instruments; and the collection of modern paintings.

The work of transferring the exhibits in the new galleries was commenced in July and is nearing completion.

SIR AKBAR HYDARI LOAN COLLECTION

The agreement between the Trustees of the Museum and the Right Honourable Sir Akbar Hydari will probably be renewed for a further period of three years. A revised list giving numbers and alterations in the titles was prepared.

PURCHASE OF EXHIBITS

The Trustees purchased a fine specimen of Indian craftsmanship, a carved stone seat, executed in the Reay Art Workshops of the Sir J. J. School of Art. It is an ornamental throne resting on four legs shaped, like dolphin and lotus. The back of the throne is divided into two compartments. The lower compartment has three panels; the middle one shows



FRONT VIEW OF AJANTA GALLERY

Ganesh seated on a full blown lotus in elaborately carved arabesque. In the side panels dwarfs are shown playing with swans in lotus rhizomes. The upper compartment is arched, the sides ending in two conventional flowers. The arms of the throne are also elaborately carved. Two lions are carved on both sides of the second step of the throne.

Five modern Indian paintings were acquired during the year for the Art Section, namely (1) "Ras Nritya" by Bhanu Smart (No. 306), (2) "Street Singer" by M. Bhatt (No. 307), (3) "Garba Dance" by D. G. Bhojwani (No. 308), (4) "Shringar (Toilet)" by V. Mali (No. 309), (5) "Love Lingers" by R. D. Dhopeshwarkar (No. 310).

"Ras Nritya" size 3'-1" \times 2'-1 $\frac{3}{4}$ " by Bhanu Smart.

A party of beautiful women dressed in lovely clothes is going round in a dance called *ras*. They are keeping time by striking small sticks which they hold in their hands. On the right side a boy and girl are watching the dance. On the left a woman is playing the *tom-tom*.

"Street Singer" size 22" \times 15" by M. Bhatt.

A street singer dressed in *bandi* and turban is playing on an *ektara*.

"Garba Dance" size 13 $\frac{1}{2}$ " \times 2' by D. G. Bhojwani.

The subject matter of this picture is the Garba Dance of Gujerat and Kathiawar. A set of beautiful girls dressed in all fineries are seen dancing and clapping, in various attitudes. The grandpa of the house is witnessing the dance seated on a *charpoi*. The flute, cymbal, and *dhol* players are accompanying the dance.

"Shringar" size 11"-7 $\frac{3}{4}$ " by V. Mali.

A lady seated on a carpet is performing her toilet before a looking glass. She has a *sindura* pot in one of her hands. She wears Marwari costume consisting of a *choli* (bodice) and skirt, head ornaments, armlet, necklaces, etc. The intentness of her face while arranging her toilet is very beautifully rendered.

"Love Lingers" size 2'-8" 11 $\frac{1}{4}$ " by R. D. Dhopeshwarkar.

The scene is adapted from the "Shakuntala". Shakuntala seated in the wilds of the hermitage, is playing with fawns. Her confidantes are lingering about. On the right Dushyanta is looking at her gambols with a loving eye.

PURCHASE OF BOOKS

The following books were purchased for the Art Section Library :—

1. Asiatic Mythology—by J. Hackin and others.
2. The New Standard Encyclopædia—published by the Times of India.
3. Illustrated Souvenir of the Exhibition of Persian Art at Burlington House, London.
4. Materials of Medieval Painting—by Daniel V. Thompson.
5. Modern Art in Western India—by K. H. Vakil.
6. Directory of the Museums of the British Isles.

The Art Section also subscribes to various Art Journals and periodicals containing illustrations, critical articles and essays on art subjects, or dealing with museum technique, such as "Islamic Culture", "Technical Studies in the Field of Fine Arts", the "Museums Journal", "Times of India Annual", etc.

LOAN OF PICTURES

Thirteen modern Indian paintings from the Art Section were loaned to the Gladstone Solomon Scholarship Fund Exhibition held in December 1936 at the Sir J. J. School of Art.

RESTORATION OF PICTURES

Two Western paintings, namely, "Don Juan in Hell" by C. Ricketts, A. R. A., and "Saying Grace" by Van de Herp, were repaired and varnished by the Curator. The pedestals of the marble and bronze sculptures of the Sir D. J. Tata Collection were repaired and strengthened; and several pieces of *kimkhabab*, Kashmir shawls and Cutch fabrics were mended.

VISITORS

Among the distinguished visitors to the Museum who visited the Art Section this year were the Maharajas of Bikanir and Kapurthala, Lady Ratan Tata, Mr. G. Yazdani, the Director, Archæological Department, Hyderabad State, with Mr. Taskar of H. E. H. the Nizam's Government, Baroness Grenier, Archbishop Nicholas of Yugoslavia, and Dr. Harold Cotton of the Museum of Northern Arizona, Flagstaff, Arizona, U. S. A. The latter was much impressed with the method of display of the Art Section exhibits, this Museum being the only one on this side he had seen during his tour which attached any importance to the method of presentation of the material to the public.

Mr. Takeshi Kobayshi, Keeper of the Sculpture Department of the Imperial Museum, Tokio, was shown round the Art Section by the Assistant Curator who explained the methods employed in cleaning and preserving the exhibits, framing of Indian pictures, etc. The names of the artists of several Japanese pictures were deciphered by the visitor.

The last to visit the Art Section a few days prior to the retirement of the Curator were Their Excellencies, the Governor and Lady Brabourne, who spent a pleasant hour inspecting the whole of the Art Section, including the new wing galleries. The distinguished visitors were much interested in the Collections of Indian and Western pictures, the Arms exhibits and the beautiful jade and lacquer of the Sir Ratan Tata collection.

MISCELLANEOUS

At the request of the Consul for Iran a list of the Manuscripts in Persian script in the Art Section was sent to him.

The work of repairs to the whole of the ceilings in Picture Galleries I and V, and of the Armoury Gallery VI, was completed, and all the large paintings belonging to these galleries, which had been stored away elsewhere, were brought back and rehung, and the galleries once more thrown open after having been closed to the public for several months.

GARDEN

The supply of flowers during the year was well maintained, except for short periods when owing to failure in germination or retarded growth of the seedlings on account of excessive heat, there was a diminished supply. During the Christmas season there was a plentiful supply of chrysanthemums, while the sale of palms and plants and the demand for their hire for hall decoration on various occasions, has been frequent, thus indicating the growing popularity of the Museum garden.

MOTI CHANDRA,
Curator, Art Section.

REPORT OF THE ARCHÆOLOGICAL SECTION FOR THE YEAR APRIL 1936 TO MARCH 1937.

PERSONNEL

The Curator was away on leave on average pay for 16 days in May and 7 days in January of this year. He also proceeded on tour for about 20 days to Mohenjodaro (Sindh) to receive the Bombay Government's share of antiquities for this Museum. He was accompanied by the Gallery Assistant, Mr. C. R. Singhal.

During the Curator's absence from Headquarters, the Assistant Curator carried on the work of the Section. He also availed himself of leave on average pay for 16 days from the 22nd of May 1936.

In view of a large number of exhibits requiring early attention and constant care, the Chemical Assistant, Mr. V. A. Banavalkar, was relieved of his clerical duties and placed solely in charge of the scientific cleaning and preservation of exhibits in the Section.

A new post of Typist-Clerk for the Section was, therefore, created and sanctioned by the Trustees. Mr. K. G. Phadke, B.A., a steno-typist and a Sanskrit scholar of Poona, was appointed from the 4th of May 1936.

REARRANGEMENT

The original rooms of the Section Office had to be vacated and turned into a passage to the new wing. The office was shifted from the east to the western lobbies vacated by the Natural History Section. The present spacious accommodation has provided room for a suitable Reading Room attached to the Library of the Section where scholars can read the various scientific and literary journals placed on the table and can also refer to the books from the Library.

Inscribed slabs from the old Epigraphical Gallery as well as typical and representative specimens from the Silahara land grants and the Canarese inscriptions lying in the south-east verandah on the ground floor were removed to the new Epigraphical Gallery in the extension where they are arranged in chronological order on a raised running platform surmounted by wooden frames and plywood cut-mounts. This design of displaying the stone slabs was approved by the Trustees and has been very much appreciated by some of the distinguished visitors.

The Gallery of the Prehistoric Antiquities is also fitted with specially designed show-cases, painted to suit the dull-coloured objects from Mohenjodaro and other sites. In these show cases are stored the statuary, seals, pottery, stone and copper implements and such other antiquities brought from Mohenjodaro together with those from Narujodaro, etc., in the Khairpur State. These will be supplemented by the other pre-historic exhibits in the old galleries, before the Gallery is thrown open to the public.



A VIEW OF THE NEW PREHISTORIC GALLERY

[In face page 4]

Plans for exhibiting these antiquities on scientific lines and to the best advantage are being devised.

The Anthropological exhibits placed in the cupboards on the ground floor were removed to the Gallery of Miscellaneous Antiquities (Gallery No. 7) and are for the present displayed on the shelves of the wall cases.

The antiquities received by way of present or on loan as well as those purchased during the course of the year were exhibited in the respective galleries according to their classification with suitable labels.

NUMISMATICS

Treasure Trove finds from the Bombay Presidency were forwarded by the local authorities for examination through the Bombay Branch of the Royal Asiatic Society from time to time, which were examined, assigned and returned with reports including lists of coins selected out of the different lots of coins for the Cabinet of this Museum. 233 silver, 1,526 copper and 548 billon Treasure Trove coins were thus examined during the year under report.

Similarly 196 gold, 37 silver and 188 copper coins that were offered for sale by different collectors and dealers were also examined with a view to make selections out of them for the Museum Cabinet.

A big lot of 1,262 coins from Mr. F. C. Petit and another one of about a thousand coins from His Majesty's Mint and several gold, silver and copper coins from Baraundah State in Central India and Bundi State in Rajputana were also examined, assigned and returned to the owners with reports of identification and valuation.

Lists of Treasure Trove coins offered for distribution were received from the Governments of the Central Provinces, the United Provinces, Bihar and Orissa and Punjab, out of which coins required for our Cabinet were selected. Requisitions for such coins were made to the respective Governments who arranged to present such coins as could be made available in due course.

The coins thus received by way of present under the Treasure Trove Act or otherwise as also those purchased from time to time during the year form the bulk of the Numismatic Acquisition.

Due to a large number of persons approaching with a request to examine their collections of coins, which was hitherto complied with free of charge, a considerable part of office time was occupied in the work. To improve this state of affairs the Trustees made rules whereby, except certain recognised institutions and learned societies, all have to pay the prescribed fee for the examination of their coin collections. About 2,300 coins were examined under these rules during the year.

GUIDES, LABELS, ETC.

Tentative labels for antiquities excavated at Khairpur State were prepared and placed in position.

Labels for the new Epigraphical Gallery are being drafted and arrangements are complete for printing them on cellophane paper.

PHOTOGRAPHIC WORK

With a view to having a permanent record of the exhibits it is intended to keep photographs of all the exhibits in the galleries, case by case, or in smaller groups, if necessary.

To begin with, all the stone inscriptions in the new Epigraphical Gallery were photographed before arranging them in their present position. These photographs, along with the prints of the other inscriptions photographed previously are arranged in chronological order in albums to facilitate collective and comparative study.

In addition to this some images and coins were photographed when they were required for study or for publication.

A glance at the list of negatives in Appendix "E" gives an idea of the photographic work done during the year.

CLEANING, PRESERVATION AND RESTORATION

The work of wholesale cleaning and preservation of exhibits in various galleries was taken up early in May and continued throughout the year by the Chemical Assistant.

All antiquities from Naru-jo-daro and Kot-Diji in Khairpur State in Sindh and from Rangpur in the Limbdi State in Kathiawad were cleaned and some of them were coated with the preservative solution.

Similarly, all the South Indian iron implements from the Pre-historic Gallery, about 30 brass and copper objects, several bronzes and 19 copper plate grants from the Brahmanical Gallery, the wooden panels from Thana, about a hundred enamelled tiles and 18 carved bricks from the Miscellaneous and 13 plaques from the Buddhistic galleries were scientifically cleaned and preserved.

180 silver, 340 copper and 39 lead coins that required cleaning before examination and preservation from the atmospheric effect while displaying in the Cabinet were scientifically treated during the year.

Some broken inscribed slabs from the Epigraphical Gallery, several pottery pieces from Sindh and some storage jars from Mohenjo-daro were joined or pieced together and restored to their original form.

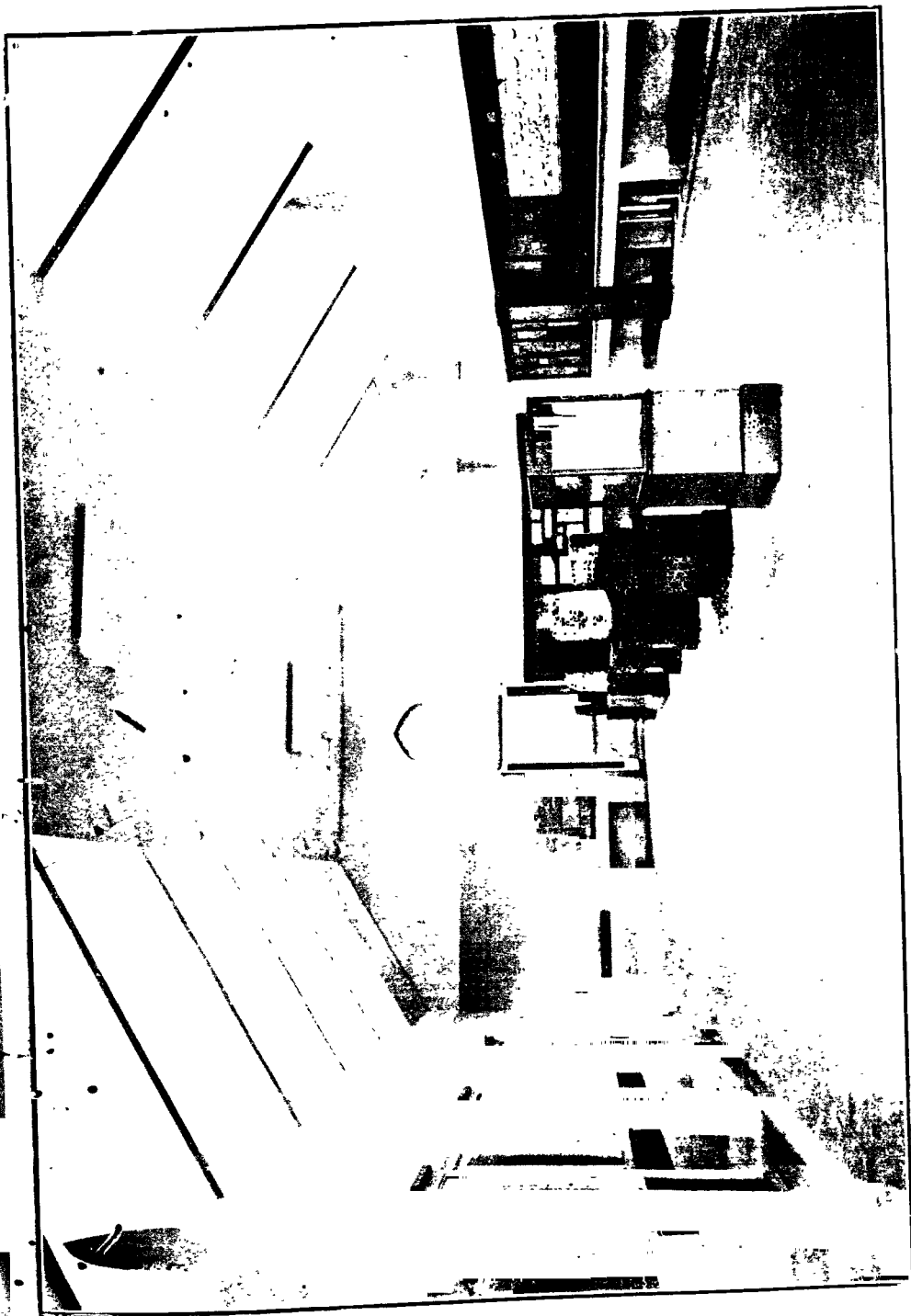
EDUCATION AND RESEARCH

The Curator gave a lecture on "The Ancient Coinage of India" to the Post-Graduate students in the University School of Economics and Sociology of Bombay.

He also read a note on "the significance of various signs on the Kshatrapa coins" at the occasion of the Annual Meeting of the Numismatic Society of India held at Udaipur and contributed an article in Gujarati on "The Curator's Work in the Museum", published in two successive numbers of "The Gujarati".

The Assistant Curator, Mr. R. G. Gyani, delivered a lecture at the inaugural meeting of the Bombay Field Club on "The Archaeological explorations around Bombay".

A VIEW OF THE NEW EPICGRAPHICAL GALLERY



He also guided the excursion of the Gujarat Research Society to Sopara and gave a talk there on "The importance and antiquity of the sea-port, Sopara".

A lantern lecture on "The Ancient Architecture of Gujarat" was also delivered by him under the auspices of the Forbes Gujarati Sabha.

His article on "The Inscriptions from the Jami Masjid at Dabhol" is published in the latest issue of the *Epigraphia Indo-Moslemica*.

A note on the Epigraphical acquisitions during the year 1935-36 and the rubbings of several unpublished Epigraphs in this Museum were supplied to the Government Epigraphist as desired by him.

ACQUISITIONS

Antiquities including images of stone and metal, inscribed seals and coins were acquired for the Section by way of present or by purchase in the usual course as they were offered.

This was supplemented by a large collection of antiquities from Mohenjodaro consisting of (a) steatite seals and sealings with different animal designs, motifs and inscriptions; (b) statuary; (c) terra-cotta figurines; (d) decorated and plain pottery; (e) stone, faience and paste objects; (f) copper and bronze exhibits; (g) objects of animal bones including ivory; (h) shells and shell objects; (i) beads, necklaces, spacers and pendants, etc.

(A) *Sculptures and Icons*.—Two stone images of Mahavira (the 1st Tirthankara) and a broken image of Vishnu from Erandol Road, Khandesh, presented by the Bombay Government; two stone heads and a four-headed image of Brahma with crocodile as vehicle found at the fort at Raisen in the Bhopal State and presented by Mr. J. J. Kirby; as well as the ten clay seals depicting miniature votive stupas and Buddhist creed from Nalanda presented by the Superintendent, Archaeological Survey, Central Circle, Patna; formed the chief iconographical acquisitions during the year.

Two Jain images, one of Kunthanath dated Samvat 1515 and the other of an unusual type of Ambika dated Samvat 1616, were purchased for the Jain Gallery of this Section.

(B) *Coins*.—The coin cabinet of the Museum was further enriched by the addition of 10 gold, 151 silver and 5 copper coins during the year.

Of these, 1 gold, 116 silver and 4 copper coins were received as present under Treasure Trove Act from the authorities of the various Provincial Governments; and the rest consisting of 9 gold, 35 silver and 1 copper coins were purchased from dealers out of the Exhibits Fund during the course of the year under report. A classified list of these coins is given in Appendix "B".

(C) *Books*.—About a hundred publications including some rare old books, annual reports and memoirs of the Archaeological Survey of India as well as the Bulletins, journals and reports of the various literary societies and Museums in India and abroad, fresh epigraphical,

numismatic and historical periodicals, guides, catalogues and books containing the results of the researches of the various branches of Archæology, Art and History, were acquired for the Library of the Section.

The books and periodicals of this Section Library are not only useful to the members of the staff but are also made available for reference to outside scholars carrying on research work in diverse branches of History and Archæology, during the office hours on the premises. They are given all facilities to read in the Reading Room of the Section.

Appendix "C" of this report is a detailed list of the books and other publications added to the Library during the year.

(D) *Blocks and Negatives*.—Only two half tone copper blocks were prepared during this year to illustrate the last Annual Report. Details of these are given in Appendix "D".

Negatives of all such photographs of exhibits as were taken departmentally, either for study or publication, are preserved for future use and reference. These are detailed in Appendix "E".

DISTINGUISHED VISITORS

Mr. Ghulam Yazdani, the Director of Archæology, H. E. H. the Nizam's State, accompanied by Khwaja Muhd Ahmad, the Curator, Hyderabad Museum, visited the Museum, with a view to compare the Mohenjodaro exhibits with the antiquities excavated by H. E. H. the Nizam's Archæological Department from an ancient site near Raichur. The points of similarity and contrast that revealed the influence of the Sindh and Deccan cultures on each other were discussed.

Dr. Chakravarti, the Epigraphist to the Government of India, also visited the Museum to see certain Silhara and other unpublished inscriptions in our galleries. He was given facilities for taking the estampages of such Epigraphs as were selected by him.

Mr. U. Lu Pe Win, Assistant Superintendent, the Archæological Survey, Burma Circle, and Mr. V. N. Singh, Curator of the Indore Museum, came to see and study the Museum exhibits. They were shown round and certain points regarding the exhibition, arrangement and labelling in the Indian Museums were discussed with them.

APPRECIATION

Our best thanks are due to the generous minded gentlemen and the Provincial Governments who enriched our galleries with the images, sculptures and coins from time to time.

G. V. ACHARYA,
Curator, Archæological Section.

APPENDIX "A".

List of Antiquities acquired during the year 1936-37.

(i) Presented.

Images—

- 1-2. Stone Images of Mahavira (one sitting in an architectural niche of a shrine and the other standing).
3. One standing image of some Vaishnavite deity.
4. A small image of (Brahma ?) seated on a crocodile.
5. A stone head of a Jain image in meditation.
6. A stone head of a lady with four waves of curly hair, etc.

Miscellaneous—

- 7-26. Twenty clay plaques inscribed with the miniature stupas and the Buddhist creed.

(ii) Purchased.

Images—

27. Brass Image of the Jain Tirthamkara Kunthanath with an inscription dated Fagan Sud. 10th, Smt. 1515.
28. Brass Image of Jain Ambika with an inscription dated Vaishakha Vad. 2, Smt. 1616.

APPENDIX "B".

List of Coins acquired during 1936-37.

Serial No.	Dynasty.	Presented.			Purchased.		
		Gold.	Silver.	Copper.	Gold.	Silver.	Copper.
1	Ancient Indian (punch- marked)	..	..	..	..	16	..
2	Kushans	..	..	..	3	..	..
3	Kshatrapas	..	1	..	..	..	..
4	Sassanian	..	..	..	..	3	..
5	Turks	..	..	2	..	..	..
6	Khilji	..	1	1	2	..	..
7	Tughlaq	..	..	..	1	..	1
8	Vijayanagar	..	1	..	..	..	..
9	Malwa	..	..	..	1	..	..
10	Gujarat	..	1	..	..	..	..
11	Mughal	..	108	1	..	5	..
12	Suri	..	..	..	..	8	..
13	East India Company	..	..	..	..	2	..
14	Nawab of Awadh	..	..	..	..	1	..
15	Bundi State	..	5	..	..	..	..
16	Junagadh State	..	..	..	2	..	..
Total ..		1	116	4	9	35	1
..		121			45		
Grand Total ..		166					

APPENDIX "C".

List of Books acquired during the year 1936-37.(i) *Presented.*

ANNUAL REPORTS.

1. Annual Report of the Varendra Research Society for 1934-35.
2. Annual Report of the Watson Museum of Antiquities, Rajkot, for 1935-36.
3. Annual Report of the Rajputana Museum for the year ending 31st March 1935.
4. Annual Report of the Bhandarkar Oriental Research Institute for 1935-36.
5. Annual Report of the Provincial Museum, Lucknow, for 1935-36.
6. Annual Report of the Victoria and Albert Museum, Bombay, 1935-36.
7. Annual Report of the Curzon Museum of Archaeology, Muttra, for 1935-36.
- 8-9. Annual Report of the Archaeological Survey of India for 1930-34, Pts. I and II.
10. Annual Report of the Central Museum, Lahore, for 1935-36.

DICTIONARY AND BOOKS OF REFERENCE.

11. Proceedings and Transactions of all India Oriental Conference at Baroda, December 1933.
12. Some of the Archaeological finds at Idar State

EPIGRAPHY.

13. Epigraphia Indica, Vol. XXI, Pt. 7.
- 14-17. Epigraphia Indica, Vol. XXII, Pts. 4-7.
18. Report on the 12 copper plate inscriptions found at Ghumli, by Maha-Mahopadhyaya H. H. Shastri.
19. Mathura Terra-Cotta, by V. S. Agrawala, Esq., B.A., LL.B.

HISTORY.

20. Karnatak Historical Review, Vol. II, Nos. 1 & 2.

JOURNALS.

- 21-24. Journal of the University of Bombay, Vol. IV, Pts. 3, 4 & 6 and Vol. V, Pt. 1.
25. Bulletin of the Raffles Museum, Series "B", No. 1.
26. Ancient India, by Mr. Karandikar.

MISCELLANEOUS.

27. Hindoo Art in its Social Setting, by Miss P. Dubash, M.A., Ph.D.
- 28-29. List of the Archaeological Photo-negatives, Pts. I and II.
30. Collection Importantes, by J. Schulman.
31. A hand-book of Gwalior, by Mr. M. B. Gadre.
32. Prince of Wales Museum Rules.

LITERATURE.

- 33-36. Brooklyn Museum Quarterly, Vol. XXIII, Nos. 1-4.

MEMOIRS.

- 37-38. Memoirs of the Archaeological Survey of India, Nos. 49-51.

NUMISMATICS.

39. Catalogue of coins of Gujarat Sultans in the Prince of Wales Museum, Bombay, compiled by Mr. C. R. Singhal.

(ii) *Purchased.*

ANNUAL REPORTS, ETC.

1. Annual Bibliography of Indian Archaeology for 1934.
2. Archaeological Survey of India, Vol. XXXII—Architectural Antiquities in Northern Gujarat.
3. Archaeological Survey of India, Vol. XXIII—Mahommedan Architecture.
4. Antiquities of Dabhoi in Gujarat, by Burges.

BUDDHISTIC BOOKS.

5. Chaturvimshati Jinananda-Stutayah, by Mr. Kapadia.
6. Buddhist Art in India, Java and Ceylon, by J. Ph. Vogel.

DICTIONARY AND BOOKS OF REFERENCE.

7. Gazetteer of the Bombay Presidency, Vol. I, Pt. II—History of Konkan, Dakkan, etc.

GUIDES.

- 8-10. British Museum Quarterly, Vol. X, Nos. 3 & 4; Vol. XI, No. 4.
- 11-13. Ain-i-Akbari, Vol. I, Pts. 1-3.
14. Prachina Bharata Varsha, Vol. II (in Gujarati), by Dr. Shah.
15. The Silahars of Western India, by A. S. Altekar.
16. India and Java, by Dr. B. R. Chatterjee, Ph.D. (Lond.), D.Litt. (Punjab).
17. Popular History of England, by F. P. G. Guizot.
18. Outlines of European History, Pt. I., by Robinson and Breasted.
19. Readings in European History, Vol. II, by Robinson.

JOURNALS.

20. Indian Culture, Index to Vol. II.
- 21-24. Indian Culture, Vol. II, No. 4; Vol. III, Nos. 1 to 3.
- 25-26. Journal of the Greater India Society, Vol. III, Nos. 1 and 2.
- 27-30. Antiquity, Vol. X, Nos. 38-40; Vol. XI, No. 41.
- 31-35. Indian Art and letters, Vol. VIII, No. 2.
Vol. IX, Nos. 1 and 2.
Vol. X, Nos. 1 and 2.
- 36-39. Annals of the Bhandarkar Oriental Research Institute—
Vol. XVII, Pts. 2-4
Vol. XVIII, Pt. 1.
- 40-41. Journal of Indian History, Vol. XV, Pts. 1 and 2.
- 42-45. Poona Orientalist, Vol. I, Nos. 1-4.

LITERATURE.

46. Asiatic Mythology, by J. Hachin.
47. Indian literature in China and far East, by P. L. Mukarji.
48. Social life in Ancient India, by H. C. Chakladar.
49. Indian influences on the literature of Java and Bali, by H. B. Sarkar.
50. Ancient Indian Culture in Afghanistan, by Dr. U. N. Ghoshal, M.A., Ph.D.
51. Rigveda, Vol. II, Mandalas 2-5, with Sayanacharya's Commentary.

NUMISMATICS.

- 52-59. Numismatic Circular, Vol. XLIV, Pts. 4-12.
- 60-62. Numismatic Circular, Vol. XLV, Pts. 1-3.

APPENDIX " D ".

List of Blocks prepared during the year 1936-37.

- | | | |
|------|--|-------------------------|
| 105. | A block of two bronze Brahmanical figures. | } For Annual
Report. |
| 106. | A block of two stucco images of Buddha. | |

APPENDIX " E ".

List of Negatives prepared during 1936-37.

- | | | |
|----------|--|--|
| 305-349. | (including 313-a & b ; and 316-a & b). | 49 plates of different Inscriptions exhibited in the new Epigraphical Gallery. |
| 350 | .. .. | Stucco images of Buddha (2). |
| 351 | .. .. | Two bronze Saivite images. |
| 352 | .. .. | Chandragupta II's gold coin. |

REPORT OF THE NATURAL HISTORY SECTION FOR THE YEAR APRIL 1936 TO MARCH 1937.

Sub-Committee in charge of the Section.

The Sub-Committee of Trustees who administered the affairs of the Natural History Section during the year comprised Rev. Fr. J. F. Caius, S.J. (Chairman), Dewan Bahadur K. M. Jhaveri (nominated by the Board of Trustees) and Mr. S. H. Prater. On his return to India Mr. P. M. D. Sanderson was re-nominated to represent the Society on the Board of Trustees, and on the 11th November 1936 he was re-elected Chairman of the Sub-Committee in place of Rev. Fr. Caius who resigned.

Finance.

The funds for the maintenance of the Section were partly provided from a grant of Rs. 29,700 received from the Government of Bombay. The transfer of the Natural History Section to the new wing and the installation of the collections in the new galleries entailed heavy expenditure which could not be met from the ordinary Government grant.

The annual grant paid by Government to the Museum is based on salaries payable to the staff. Beyond making an initial grant of Rs. 40,000 to cover the cost of installing the Society's collections in the Museum in the year 1921, Government have made no further special grants to the section to meet the cost of show cases and equipment. The section has been dependent for this provision either on funds raised by the Society or on savings from the Government grant effected by reducing or otherwise limiting expenditure on salaries. A reference to the abstracts of statement of accounts submitted annually to Government will indicate that the total revenue accruing to the Section from the grants made by Government between the years 1921 and 1936 amounted to Rs. 3,97,000, the total expenditure amounted to Rs. 4,24,300-15-0. The deficit amounting to Rs. 27,300 15-0 has been met partly by interest on investments and sales of publications and partly by contributions amounting to Rs. 14,730-9-6 made to the section from time to time by the Society. This was the position when the section was transferred to the new wing in 1936. Government has so far made no provision to meet the cost of transferring and installing the collections in the new building. To meet this expenditure the Society made contributions amounting in all to Rs. 18,357-4-0 from subscriptions raised specially for the purpose. In addition, to meet urgent expenses, the Society advanced the section a sum of Rs. 5,000 from its revenues, and in July 1936, the Board of Trustees of the Museum granted the section a loan

of Rs. 2,500. In August 1936 the Chairman of the Sub-Committee drew the attention of the Board of Trustees to the urgent need of financial assistance from Government, if the work of installing the collections in the new wing was to be completed satisfactorily. The Trustees had made special grants to the Art and Archæological Sections to meet additional expenditure incurred in the extension of these sections in the new building. The Natural History Section under the terms of the existing agreement, can make no claim on the Trustees for such assistance. It is dependant solely on Government which has accepted the responsibility for its proper maintenance. In August 1935, an application was submitted to Government by the Chairman of the Board of Trustees for a special non-recurring grant of Rs. 17,500 to enable the section to repay loans amounting in all to Rs. 7,500 received from the Society and the Board of Trustees and to cover the cost of completing the installation of the section in the new wing which is estimated to cost Rs. 10,000.

In February 1937 an intimation was received from Government that a non-recurring grant of Rs. 17,500 would be made to the section in the year 1937-38 subject to sanction by the Legislatures. Constitutional changes have delayed the consideration of this provision, but the shortage of funds has seriously affected the progress of the work and will delay the opening of the section to the public.

Thanks to the generosity of the Trustees of the Sir Ratan Tata Charities, the Society received a donation of Rs. 2,000 for the Museum which provided temporary relief. We take this opportunity of expressing our thanks to the donors for their generous assistance. The section has once again to acknowledge its indebtedness to Mr. F. V. Evans, who contributed a sum of Rs. 2,200 for providing exhibits and show cases for the Fish Gallery.

The Natural History Section was referred to especially at the Conference of the Museums Association held at Leeds in August 1936, where Mr. Markham, the senior author of the Report on Museums in India, described its galleries as amongst the best in the world and worthy of every attention. It should be stated that the generosity of various private agencies and individuals has contributed substantially to this achievement.

THE RESEARCH COLLECTIONS.

Work was continued during the year on the cataloguing and indexing of the reference collections. These collections continue to be housed partly in the Society's rooms at 6, Apollo Street, and partly in the Prince of Wales Museum. It is most unfortunate that the funds at the disposal of the Trustees were insufficient to provide for the completion of the entire new wing as originally planned—where provision was made for the proper accommodation of the reference collections. The existing accommodation for these collections is both insufficient and unsuitable and adds greatly to the labour of caring for them and

introduces a considerable element of risk for their safety from fire and damage in other ways. Mr. Markham who inspected these collections during his survey of Museums in India, while he expressed satisfaction as to their general condition, commented strongly on the insecurity of the present accommodation. Better provision for the housing of the study collections is an imperative need of the Natural History Section. Its collections of Mammals, Birds and Reptiles are perhaps the most important collections available to students in the East and it is the duty of those responsible for their safe keeping to draw the attention of Government to the wholly unsuitable condition under which these collections are now housed.

Mammals. During the year material from the collections comprising the *Canidae* (Wolves, Foxes, Wild Dogs) and the *Mustelidae* (Martens, Weasels, etc.) were forwarded to Mr. Pocock of the British Museum, for study in connection with his revision of Blanford's *Mammalia*. A revision of the genus *Vulpes* based on this material was published by Mr. Pocock in the *Journal* of the Bombay Natural History Society during the year under review.

Birds. References have been made in previous reports to the collections made by members of the Museum staff in the Eastern Ghats. The Scientific Results of this Survey are being published in a series of reports in the *Journal* of the Bombay Natural History Society. Parts XIII and XIV were published during the year. They deal with the Birds of Prey, Pigeons, Doves, Game Birds, Waders and include the descriptions of two new races: the Ceylon Crested Goshawk (*Astur trivirgatus layardi*) and a West Himalayan form of the Besra Sparrow Hawk (*Accipiter virgatus kashmirensis*). Reports were also published in the Society's *Journal* on the collection made in Travancore by Mr. Salim A. Ali and Mr. E. Henricks of the Museum staff.

Birds of Bombay and Salsette.—Since the publication of Eha's classic work on the Common Birds of Bombay, a considerable advance has been made in our knowledge of the classification and distribution of Indian Birds. Mr. Salim A. Ali and Humayun Abdulali have undertaken the production of an up-to-date account of the Birds of Bombay and Salsette, based on material in the Museum collections and on notes and collections made by the authors and members of the Museum staff. The work will contain notes on field identification and habits of the species. It is being issued as part of the series of pamphlets on the Fauna of Bombay and Salsette, published by the Natural History Section of the Museum. The work will provide a useful guide to students interested in the Bird life of Bombay and its suburbs.

Reptiles. Assistance was also given to Dr. Malcolm Smith, Curator of Reptiles in the British Museum, who is writing the new volume on Reptiles in the Fauna of British India Series. During the year Dr. Malcolm Smith was given the opportunity of studying the *Colubridae* and *Viperidae* in the Museum collections which have now been revised by him and returned.

As usual assistance was accorded to various hospitals and dispensaries and to private individuals in the identification of snakes, etc. sent to the Museum and a considerable amount of correspondence was entered into with various enquirers on Natural History subjects.

Fishes.—The collections of the Museum have been greatly enriched by surveys of the fresh water fishes of the Deccan Streams and Lakes made by Dr. A. G. Fraser, I.M.D., at Deolali and Poona. The collections were forwarded to Dr. S. L. Hora of the Indian Museum. The material has proved invaluable to Dr. Hora in his revision of the Day's Volume on Fishes in the Fauna of British India Series. Scientific Reports on these collections are now in course of preparation.

THE PUBLIC GALLERIES.

The galleries of the Section remained closed to the public during the year under review, as the work of installing the collections is still in progress. Attention has already been drawn elsewhere in the report to the causes which have retarded the work considerably. Nevertheless, thanks mainly to the generous financial assistance received from private sources, progress was made in all the galleries during the year.

Mammal Gallery.

During the year work was concentrated mainly on the five large habitat groups which are built in alcoves along the north wall of the gallery. In May 1936, Mr. Vallee the artist was sent to the Billigirirangan hills in Mysore to make studies for the painting of the background of the Bison Group. He also had the opportunity of making sketches in the deciduous forest in the adjoining plains for the Spotted Deer group and collected the necessary plants and accessories. On his return he completed the background of these two groups, and painted the backgrounds for the Blackbuck, the Tiger and Kashmir Stag groups, from studies made in the Deccan plains, Assam and Kashmir. The modelling of the plants, trees and other accessories for these groups was also undertaken and the work of mounting the animals was commenced.

For the present it is proposed to use the existing fine specimen of the bull Bison in the group of these animals. It is to be shown with a cow and calf in attendance. The manikin for the cow was prepared during the year as well as five manikins of male, female and young for the Blackbuck group.

The Tiger group, shown in the old Museum, was rebuilt during the year on a slightly larger scale. This involved the repainting of the background and the preparation of additional accessories. The group was completed during the year. A second group which was reconstructed is the Kashmir Stag group. The fine treatment of the background, which represents a scene in the Liddar Valley, Kashmir, the trees and



The Bird Gallery

NATURAL HISTORY SECTION, PRINCE OF WALES MUSEUM

rocks of the foreground all combine to provide a beautiful setting for the Stag. Thanks to the generosity of the Kashmir Darbar, a complete set of skins and skeletons of a Kashmir Stag, a hind and fawn were obtained especially for this group by the Game Warden, Kashmir, to whom our thanks are due.

The systematic series of Mammals, occupying the entire length of the south wall of the gallery, is continued in cases set against the pillars which divide the alcoves in which the groups are built. During the year the preliminary arrangement of the exhibits in these cases was undertaken. Many of the specimens will require replacement but this is a work which must be left for the future.

One of the problems in this gallery was to protect the wall surface of the entrance and exit and the exposed plaster work of the pillars between the groups from being soiled. It is proposed to cover the lower wall surface with a panelling of 3-ply wood stained to a suitable colour. Part of the panelling was completed during the year. It adds considerably to the beauty of the gallery and provides a dignified setting for the groups and cases.

Bird Gallery.

The installation and arrangement of the collections in this gallery are almost complete. A distinctive architectural feature in the galleries of the new wing is that the windows are situated at a height of 8 ft. from ground level. This cuts off direct light from the show cases and directs the volume of light into them from above, thus providing the most satisfactory method of lighting. The raising of the level of the windows also leaves a continuous unbroken wall surface below and so provides the maximum exhibition area. The show cases in the bird gallery measure 7 ft. in height and 18 ins. in depth. They are aligned consecutively along 3 walls of the gallery. The fourth wall, that facing the entrance, contains 3 large habitat groups. Such cases as occupy the floor are relegated to the centre leaving ample space for the circulation of visitors. As these floor cases do not exceed 3 ft. in height, there is nothing to obstruct the view of the gallery as a whole. The impression on entering is one of spaciousness, to which is added the pleasing effect of an attractive colour scheme. The dark green of the show cases, the paler green of the walls, the aluminium metal frames of the glass frontages of the groups all combine to produce a harmonious and pleasing impression.

Three beautiful dioramas confront the visitor on entering. A nesting colony of Flamingoes forms the centre piece. The birds are seen sitting upon or standing by their curious cone-shaped nests, some of the nests contain eggs and others young in various stages of development. The painted background and a correct handling of the perspective gives the impression of a vast colony of hundreds of birds seen in the open setting of the desert; in the distance is the low outline of the hills and over all the glowing light of sunrise. In Nature such a flamingo "city" inhabited by hundreds of birds in their roseate breeding plumage offers a scene

of indescribable beauty given to few to see. That we are able to reproduce the scene in the Museum, we owe to the generosity of H. H. the Maharao of Cutch and the members of the expedition which brought back all the necessary material for the group. Paintings were made of the actual nesting ground in the desert of the Rann of Cutch, photographs taken, plaster casts of the nests were made and parents and young birds were collected. The group was completed during the year. It was built by Mr. C. McCann. The birds were mounted by Mr. E. Henricks and the background painted by Mr. H. N. Wandrekar.

Two other dioramas were completed during the year. One of them shows a Griffon Vulture with young perched on ledge of a vertical cliff; below is a birds-eye view of the Ulas river winding over the level plain and beyond the outline of the "Cathedral Rocks" a familiar landmark on the road from Bombay. The second group illustrates the huge accumulation of sticks, dried boughs and branches which make up the nest of the Lämmergeyer. Outside the nest is golgotha of animal remains—of legs and bones whole or shattered. The nest is roughly lined with masses of wool which form a bed for a baby Lämmergeyer in its smokey-brown down plumage. The mother bird is seen in attendance and nearby, sitting on a pinnacle of rock is the male bird, a magnificent creature. The cavern of the nest is overhung by a mass of rock, below is the sunlit valley and beyond the noble setting of the Simla Hills. The background was painted by Mr. Vallee from studies made at the nesting site, the group was constructed by Mr. McCann, the birds mounted by Mr. Henricks while the plants and other accessories are the work of Mr. Gilbert.

The cases showing the classified series of birds are arranged along the walls of the gallery and are interspaced with 12 small groups illustrating the nesting habits of various birds. Four of these groups were completed during 1935 and during 1936 three others were finished. They illustrate the Black-capped Blackbird (*Merula nigripileus*), the Western Tragopan (*Tragopan temminckii*) and the Great Indian Hornbill (*Dichoteros bicornis*). The last is a reconstruction of the old group which is now shown in a finer setting.

The arrangement of the classified series of exhibits in 14 large wall cases was completed during the year. The birds are grouped in systematic order, each family is illustrated with examples of the more typical species. Particular care has been taken to avoid overcrowding and undue multiplication of species, as such the visitor is given a clear synopsis of Indian bird life, classified according to families, genera and species. As far as possible, in each family one species is chosen to provide a "centre piece". It is shown against an appropriate painted or photographic background illustrative of its particular habitat. The centre piece adds considerably to the general interest of the systematic collection. Each family is clearly demarcated with strips of beading painted to match the background. During the year two large floor cases were constructed for exhibiting the Ducks and the Pheasants. These ground birds show up much better on floor cases than they do in vertical wall cases.

Fish and Reptile Gallery

NATURAL HISTORY SECTION, DEPT. OF WATER RESOURCES

11/10/66 p.d.



Reptiles, Fishes and Amphibians.

Fishes, Reptiles and Amphibians are exhibited in a single gallery. Three large dioramas occupy the north wall of the gallery. These include a submarine group of Sharks which forms the centre piece. The second is designed to show a 20 ft. Reticulate Python in the setting of a Malay Jungle, while in the third, Logger-head Turtles are seen coming ashore to lay their eggs. The entire east wall of the gallery is occupied with the classified collection of fishes. They are shown in 14 large vertical cases arranged in bays, each bay being lit by a window let into the wall above the level of the show cases. The south wall of the gallery is pierced with two large openings which provide the windows for two aquatic groups illustrating Sea Snakes in a coral reef and the nesting habits of a fish known locally as the *Gourami*. Along the west wall of the gallery a series of desk cases is provided for exhibiting the classified series of Snakes, Lizards, Tortoises and Frogs. The desk cases have been built so as to utilise the space below the desk for small groups illustrating the habits of the species shown in them. As the floors of the desk cases are made of ground glass the light penetrates to the groups below. Reptiles look best in these floor cases and their location below the systematic exhibits, both adds to the interest of the collection and makes for economy of space.

Fishes.—The Submarine diorama Group of Sharks which forms the central group in the gallery was completed during the year. The forms represented are the Gangetic Shark (*Carcharias gangeticus*), the Black-finned Shark (*C. menisorrh*), the Brown Shark (*Odontaspis tricuspidatus*) and the Hammer-headed Shark (*Zygæna blochii*). The species are represented by models prepared by Mr. Jog whose skill deserves great praise. The under-water effect in the diorama, which is most realistic, has been achieved partly by lighting and partly by the treatment of the background and of the glass frontage of the case. The background was spray-painted by Mr. Von Driburg, whose clever handling of the subject has reproduced the subtle gradations of tone from the density of the lower depths to the transparency of the sun-lit surface waters. This effect has been accentuated by concentrating the play of electric light on the upper areas of the painted background. The lights are placed in juxtaposition with the background and concealed from view by means of a double ceiling. The volume of light coming up from behind silhouettes the fishes and the aqueous effect is further increased by treating the glass frontage with a fine layer of transparent varnish tinted to the required shade. The treatment of so large an area of glass in this way requires skillful handling. The varnish, the consistency of which is reduced by dilution with spirit, was poured along the top edge of the glass which was placed at a convenient angle so that the medium flowed evenly over the surface and gravitated towards the bottom. In this way the density of the varnish in the lower area of the glass is increased. If necessary the density of the lower part of the glass can be still further increased by spraying varnish with a spray pump. Glass treated in this way provides

an excellent medium for representing under-water effects, particularly if its effect is combined with the correct painting of the background and the appropriate lighting.

The classified series of fishes consists exclusively of casts made in wax and *papiermaché*. Moulds of 123 species have been taken so far from fresh specimens. Thirty-seven casts were prepared during the year. We are particularly indebted to Dr. A. G. Fraser who collected several fresh water fishes in Poona and Deolali and sent them to the Museum packed in ice in a condition suitable for casting. Our thanks are also due to Dr. S. L. Hora of the Indian Museum who secured for us a specimen of the Indian Trout (*Barilius bola*). Dr. Hora also very kindly revised and brought up-to-date for us the scientific names adopted in the labelling of the specimens.

The wall area above the fish cases has been decorated with murals which are the work of Mr. A. Vallee. The central mural covering an area of 30 x 6 ft., illustrates the fishing industry in Bombay and is based on studies made by the artist in the local fishing villages and on photographs. The painting shows the type of boats used in fishing, the landing and sorting of the fish, and the methods used in drying the famous "Bombay Duck". In the background is a fishing village where fisher folk are occupied in painting the boats, cleaning and repairing the nets.

Reptiles.—Work was concentrated during the year mainly on the preparation of casts of various snakes, lizards, turtles and tortoises. Among these was the cast of an 8 ft. Mugger (*Crocodilus palustris*), taken from a fresh specimen presented by the Victoria Gardens, Bombay. An extraordinary life-like model of the reptile has been produced—the head, body and limbs were moulded in plaster while the portion of the tail with its double crest of plates has been done in *papiermaché* to avoid risk of breakage.

As regards snakes, the Section already had a series of casts sufficient to provide the nucleus of a systematic collection. During the year, casts of 5 species of sea snakes were taken. The casts of two King Cobras were completed and painted. The two examples of this snake, measuring a little over 12 ft. in length, are now shown in a large floor case occupying the centre of the gallery. One of the King Cobras is seen rearing up, the other coiled up among the dead leaves and rank vegetation, characteristic of the wet forests where these snakes usually live. The 20 ft. cast of the Malay Python was completed and painted during the year and is now ready for introducing into the large habitat group, where it will be the central figure. Four small snake groups were also completed during the year. These include a Russell Viper with its brood of young, illustrating ovi-viviparous snakes, and a Cobra (oviparous snakes). A Green Whip Snake seen coiled amongst the leaves, flowers and tendrils of a creeper provides a perfect example of colour assimilation, while the fourth group shows a Checkered Water Snake in a lotus pool. Colour varieties of this species are introduced to illustrate variation.

Lizards.—Except for its spirit collection, the Section possessed no lizards suitable for exhibition. Work during the year was concentrated on preparing casts of typical Indian species. Twenty-seven casts were completed. Fresh specimens were obtained for casting as far as possible but in many instances we had to use spirit specimens. These are not always satisfactory as they tend to become shrivelled and distorted, but it was found that much of this disappears if the specimen is partially skinned and filled with clay to restore the natural form. If then set in a natural attitude, quite good moulds may be prepared from such specimens.

Tortoises and Turtles.—Work was commenced during the year on the preparation of a large diorama illustrating the breeding habits of the Logger-head Turtle. Numbers of these turtles come ashore every year near Bombay to lay their eggs. The scene selected for the group is the palm fringed beach at Malad near Bombay. The turtles for this group were cast during the year. Casts were also made of various species for the systematic collection. These include a specimen of *Trionyx gangeticus* the Soft-shelled Turtle of the Ganges obtained through the Indian Museum, Calcutta.

Invertebrate Section.

The funds at present available are insufficient to provide for the full complement of show cases for this Section and the plans for this gallery have to be held in abeyance until financial assistance is received from Government. In the meanwhile work is being carried out on the rearrangement of the Insect Cases. The specimens are being replaced where necessary. Paper labels and diagrams are being replaced with labels in cellophane. While the work has involved considerable amount of time and labour, it nevertheless marks a vast improvement on the old system of labelling—not only in attractiveness but also in durability. The replacement of the cork sheets on which the insects were formerly pinned with vitrolite and the paper labels, with labels in glass and cellophane have banished the unsightly mottling and discolouration which detracted so much from the appearance of these cases and which involved constant labour and expense in replacement.

Labelling.—Enquiries have been received from various Museums both in India and abroad as to the precise method employed in the preparation of cellophane labels. This type of labelling was first introduced in the Natural History Section and was the result of several experiments carried out to provide a label which would be proof against deterioration from climatic or other causes. An explanation of the methods employed may be of some practical value to those desirous of introducing this method of labelling. The cellophane used is supplied in sheets available from Messrs. Courtaulds, Ltd., Rampart Row, Bombay, who are the Manufacturers' Agents in India. The glass used for the labels is cut to the required size, the edges being ground or bevelled. The medium employed for sticking the printed label to the glass is pure gum arabic

which is brushed evenly over the surface of the glass. The label cut to a size slightly larger than the glass, is immersed in water and applied quickly and evenly to the gummed surface. It is smoothed down with blotting paper and a rubber roller. This requires a little practice to avoid wrinkling or air bubbles. When dry, the overlapping edges of the label are trimmed with a razor blade. Besides print, cellophane lends itself equally to the preparation of diagrams. Water-proof Indian ink should be used for this and if the diagrams are to be coloured, this is done either with water-proof inks or with oil colours. Cellophane and glass labels are transparent and take their colour from the painted background of the cases in which they are used. So employed they harmonise perfectly and are not unnecessarily obtrusive, but in instances where it is necessary to colour the label this is done by spraying the reverse with paint of the required shade.

Reference has been made in the last Annual Report to the painting of the show cases in the various galleries of the Section. For desk and floor cases which are subject to constant handling by visitors, it has been found necessary to protect those portions of the frame work which come most into contact with the hands of visitors, with a covering of aluminium metal. Aluminium is available in strips of various widths and is supplied in three qualities—highly polished, satin finish and raw. Experiment has shown that the raw metal is most suitable, it does not show finger prints and is easily cleaned with warm water and is inexpensive.

I cannot close this report without special reference to the work of Mr. C. McCann, the Assistant Curator, whose skill and enthusiasm has contributed so much to the success of the work carried out during the year.

S. H. PRATER,
Curator, Natural History Section.

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	Rs. a. p.
1. The Western Pictures and Modern Indian Pictures	0 6 0 each.
2. Guide to the Art Section	0 12 0 ..
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